

ORGAN PRESERVATION APPARATUS AND METHODS**ABSTRACT OF THE DISCLOSURE**

[0068] This invention is a transportable organ preservation system that substantially increases the time during which the organ can be maintained viable for successful implantation into a human recipient. A chilled oxygenated nutrient solution is pumped through the vascular bed of the organ after excision of the organ from the donor and during transport. The device of the present invention uses flexible permeable tubing to oxygenate the perfusion fluid while the CO₂ produced by the organ diffuses out of the perfusion fluid. One pressurized two liter "C" cylinder that contains 255 liters of oxygen at standard temperature and pressure can supply oxygen for up to 34 hours of perfusion time. The device uses a simple electric pump driven by a storage battery to circulate the perfusion fluid through the organ being transported. The vessel containing the organ to be transported is held at 4°C by coolant blocks.